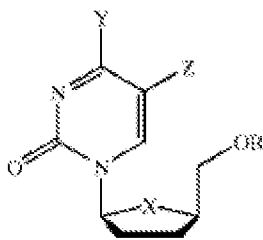


Amendments to the Claims

Please amend the claims as follows:

Claims 1-30 (Canceled).

Claim 31 (Currently Amended): A pharmaceutical composition for the treatment ~~and/or prophylaxis~~ of an HCV infection in a host, comprising an effective treatment amount of a 2',3'-dideoxynucleoside of the formula:



or a pharmaceutically acceptable salt or prodrug thereof, wherein

(i) X is O, S, S=O, SO₂, NR¹, N⁺R¹R², CH₂, CHF or CR³R⁴;

R¹ and R² are independently hydrogen, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, or C₃₋₈ cycloalkyl;

R³ and R⁴ are independently hydrogen, halogen (F, Cl, Br, or I), OH or OR⁵;

R⁵ is hydrogen or a hydroxyl protecting group; ~~such as alkyl, acyl or silyl;~~

(ii) Y is NH₂, NHR⁶, NR⁶R⁷, OH or OR⁸

each R⁶, R⁷ and R⁷ is independently H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₈ cycloalkyl, cyclopropyl, or C₂₋₆ acyl;

(iii) Z is chosen from hydrogen, halogen (F, Cl, Br, or I), C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, CN, CF₃, N₃, NO₂, aryl, heteroaryl and COR⁹;

R^9 is chosen from H, OH, SH, C_{1-6} alkyl, C_{1-6} aminoalkyl, C_{1-6} alkoxy and C_{1-6} thioalkyl; and

- (iv) R is ~~hydrogen~~, phosphate; acyl; $-C(O)R^{10}$, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group, ~~which, when administered *in vivo*, is capable of providing a compound wherein R is H or phosphate;~~

R^{10} is a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, monophosphate, diphosphate, triphosphate, or $-P(O)(OR^{11})_2$;

each R^{11} is independently hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl or a hydroxyl-protecting group;

together with pharmaceutically acceptable carrier.

Claim 32 (Original): The pharmaceutical composition of claim 31, wherein Z is not hydrogen.

Claim 33 (Original): The pharmaceutical composition of claim 31, wherein Z is a halogen (F, Cl, Br, or I).

Claim 34 (Original): The pharmaceutical composition of claim 33, wherein Z is F.

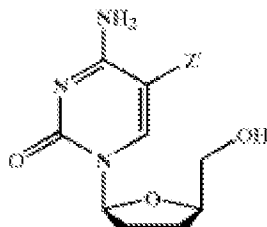
Claim 35 (Original): The pharmaceutical composition of claim 31, wherein the 2',3'-dideoxynucleoside is in the β -L-configuration.

Claim 36 (Original): The pharmaceutical composition of claim 35, wherein the β -L-2',3'-dideoxynucleoside is enantiomerically enriched.

Claim 37 (Original): The pharmaceutical composition of claim 35, wherein the β -L-2',3'-dideoxynucleoside is substantially free of the β -D-2',3'-dideoxynucleoside.

Claim 38 (Original): The pharmaceutical composition of claim 35, wherein the β -L-2',3'-dideoxynucleoside is in isolated form.

Claim 39 (Currently Amended): A pharmaceutical composition for the treatment ~~and/or~~ ~~prophylaxis~~ of an HCV infection in a host, comprising an effective amount of a compound of the formula:

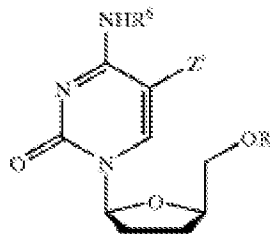


or a pharmaceutically acceptable salt or prodrug thereof, wherein

Z' is chosen from ~~halogen (F, Cl, Br, or I), C₁₋₆ alkyl~~, C₂₋₆ alkenyl, C₂₋₆ alkynyl, CN, CF₃, N₃, NO₂, aryl, heteroaryl and COR⁹; and

R⁹ is chosen from H, OH, SH, C₁₋₆ alkyl, C₁₋₆ aminoalkyl, C₁₋₆ alkoxy and C₁₋₆ thioalkyl together with a pharmaceutically acceptable carrier.

Claim 40 (Currently Amended): A pharmaceutical composition for the treatment ~~and/or~~ ~~prophylaxis~~ of an HCV infection in a host, comprising an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt or prodrug thereof, wherein

(i) R⁶ is [[H,]] C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₈ cycloalkyl, cyclopropyl, or C₂₋₆ acyl; and

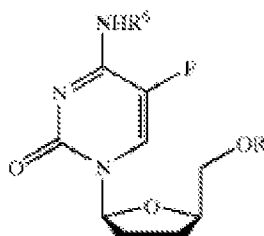
- (ii) R is hydrogen, phosphate, acyl, $-C(O)R^{10}$, alkyl, sulfonate ester, sulfonyl, a lipid, an amino acid, a carbohydrate, a peptide, a cholesterol, or other pharmaceutically acceptable leaving group; phosphate; acyl; $-C(O)R^{10}$, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group, which, when administered in vivo, is capable of providing a compound wherein R is H or phosphate;
- (iii) Z' is chosen from halogen (F, Cl, Br, or I), C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, CN, CF₃, N₃, NO₂, aryl, heteroaryl and COR⁹; and

R⁹ is chosen from H, OH, SH, C₁₋₆ alkyl, C₁₋₆ aminoalkyl, C₁₋₆ alkoxy and C₁₋₆ thioalkyl;

together with a pharmaceutically acceptable carrier.

Claim 41 (Cancel).

Claim 42 (Currently Amended): A pharmaceutical composition for the treatment ~~and/or prophylaxis~~ of an HCV infection in a host, comprising an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt or prodrug thereof,

- (i) R⁶ is [[H,]] C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, or C₃₋₈ cycloalkyl; and
- (ii) R is hydrogen, phosphate; acyl; $-C(O)R^{10}$, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group; ~~which, when administered in vivo, is capable of providing a compound wherein R is H or phosphate;~~

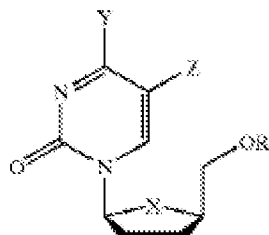
together with a pharmaceutically acceptable carrier.

Claim 43 (Currently Amended): The pharmaceutical composition of any one of claims 39-40 and 42, ~~[[40,]]~~ wherein the β -L-2',3'-dideoxynucleoside is enantiomerically enriched.

Claim 44 (Currently Amended): The pharmaceutical composition of any one of claims 39-40 and 42, ~~[[40,]]~~ wherein the β -L-2',3'-dideoxynucleoside is substantially free of the β -D-2',3'-dideoxynucleoside.

Claim 45 (Currently Amended): The pharmaceutical composition of any one of claims 39-40 and 42, ~~[[40,]]~~ wherein the β -L-2',3'-dideoxynucleoside is in an isolated form.

Claim 46 (Currently Amended): A pharmaceutical composition for reducing the biological activity of a *Flaviviridae* viral infection in a host comprising an effective amount of a 2',3'-dideoxynucleoside of the formula:



or a pharmaceutically acceptable salt or prodrug thereof, wherein

(i) X is O, S, S=O, SO₂, NR¹, N⁺R¹R², CH₂, CHF or CR³R⁴;

R¹ and R² are independently hydrogen, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, or C₃₋₈ cycloalkyl;

R³ and R⁴ are independently hydrogen, halogen (F, Cl, Br, or I), OH or OR⁵;

R⁵ is hydrogen or a hydroxyl protecting group; ~~such as alkyl, acyl or silyl;~~

(ii) Y is NH₂, NHR⁶, NR⁶R⁷, OH or OR⁸

each R^6 , R^7 and R^7 is independently H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-8} cycloalkyl, cyclopropyl, or C_{2-6} acyl;

- (iii) Z is chosen from hydrogen, halogen (F, Cl, Br, or I), C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, CN, CF_3 , N_3 , NO_2 , aryl, heteroaryl and COR^9 ;

R^9 is chosen from H, OH, SH, C_{1-6} alkyl, C_{1-6} aminoalkyl, C_{1-6} alkoxy and C_{1-6} thioalkyl; and

- (iv) R is ~~hydrogen~~, phosphate; acyl; $-C(O)R^{10}$, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group; ~~which, when administered *in vivo*, is capable of providing a compound wherein R is H or phosphate;~~

R^{10} is a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, monophosphate, diphosphate, triphosphate, or $-P(O)(OR^{11})_2$;

each R^{11} is independently hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl or a hydroxyl-protecting group;

together with a pharmaceutically acceptable carrier.

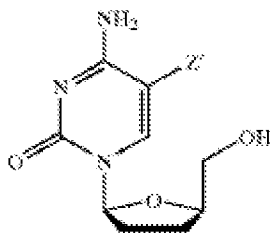
Claim 47 (Original): The pharmaceutical composition of claim 46, wherein Z is not hydrogen.

Claim 48 (Original): The pharmaceutical composition of claim 46, wherein Z is a halogen (F, Cl, Br, or I).

Claim 49 (Original): The pharmaceutical composition of claim 48, wherein Z is F.

Claim 50 (Original): The pharmaceutical composition of claim 46, wherein the 2',3'-dideoxynucleoside is in the β -L-configuration.

Claim 51 (Currently Amended): A pharmaceutical composition for reducing the biological activity of a *Flaviviridae* viral infection in a host comprising an effective amount of a compound of the formula:



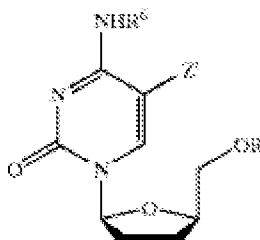
or a pharmaceutically acceptable salt or prodrug thereof, wherein

Z' is chosen from ~~halogen (F, Cl, Br, or I)~~, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, CN, CF₃, N₃, NO₂, aryl, heteroaryl and COR⁹; and

R⁹ is chosen from H, OH, SH, C₁₋₆ alkyl, C₁₋₆ aminoalkyl, C₁₋₆ alkoxy and C₁₋₆ thioalkyl.

together with a pharmaceutically acceptable carrier.

Claim 52 (Currently Amended): A pharmaceutical composition for reducing the biological activity of a *Flaviviridae* viral infection in a host comprising an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt or prodrug thereof, wherein

- (i) R⁶ is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₈ cycloalkyl, cyclopropyl, or C₂₋₆ acyl; and
- (ii) R is ~~hydrogen~~, phosphate; acyl; -C(O)R¹⁰, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically

acceptable leaving group; ~~which, when administered *in vivo*, is capable of providing a compound wherein R is H or phosphate;~~

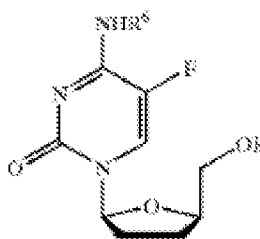
- (iii) Z' is chosen from halogen (F, Cl, Br, or I), C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, CN, CF₃, N₃, NO₂, aryl, heteroaryl and COR⁹; and

R⁹ is chosen from H, OH, SH, C₁₋₆ alkyl, C₁₋₆ aminoalkyl, C₁₋₆ alkoxy and C₁₋₆ thioalkyl;

together with a pharmaceutically acceptable carrier.

Claim 53 (Cancelled).

Claim 54 (Currently Amended): A pharmaceutical composition for reducing the biological activity of a *Flaviviridae* viral infection in a host comprising an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt or prodrug thereof,

- (i) R⁶ is [[H,]] C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, or C₃₋₈ cycloalkyl; and
- (ii) R is hydrogen, phosphate; acyl; -C(O)R¹⁰, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group; ~~which, when administered *in vivo*, is capable of providing a compound wherein R is H or phosphate;~~

together with a pharmaceutically acceptable carrier.

Claim 55 (Original): The pharmaceutical composition according to claim 52, wherein the *Flaviviridae* viral infection is an HCV infection.

Claim 56 (Currently Amended): The pharmaceutical composition according to ~~any one of claims~~ claim 31 or claim 46, further comprising one or more other antiviral agent(s).

Claim 57 (Original): The pharmaceutical composition according to claim 56, wherein the antiviral agent is selected from the group consisting of ribavirin, interferon, PEGASYS (pegylated interferon alfa-2a), INFERGEN (interferon alfacon-1), OMNIFERON (natural interferon), ALBUFERON, REBIF (interferon beta-1a), Omega Interferon, Oral Interferon Alpha, Interferon gamma-1b, Interleukin-10, IP-501, Merimebodib VX-497, AMANTADINE (Symmetrel), HEPTAZYME, IDN-6556, XTL-002, HCV/MF59, CIVACIR, LEVOVIRIN, VIRAMIDINE, ZADAXIN (thymosin alfa-1), CEPLANE (histamine dihydrochloride), VX 950/LY 570310, ISIS 14803, IDN-6556 and JTK 003.

Claim 58 (Currently Amended): The pharmaceutical composition according to ~~any one of claims~~ claim 31 or claim 46, wherein the host is a human.

Claim 59 (Currently Amended): The pharmaceutical composition according to ~~any one of claims~~ claim 32 or claim 46, wherein the host is also infected with HIV and/or HBV.

Claim 60 (Original): The pharmaceutical composition according to claim 59, wherein the host is a human.

Claim 61 (Withdrawn; New): A method for the treatment of an HCV infection in a host, which comprises:

administering an effective amount of the pharmaceutical composition as claimed in any one of the claims 31-40 and 42.

Claim 62 (Withdrawn; New): The method as claimed in claim 61, wherein the host is a human.

Claim 63 (Withdrawn; New): The method as claimed in claim 61, wherein the host is also infected with HIV and/or HBV.

Claim 64 (Withdrawn; New): A method for the treatment of an HCV infection in a host, which comprises:

administering an effective amount of the pharmaceutical composition as claimed in claim 43.

Claim 65 (Withdrawn; New): The method as claimed in claim 64, wherein the host is a human.

Claim 66 (Withdrawn; New): The method as claimed in claim 64, wherein the host is also infected with HIV and/or HBV.

Claim 67 (Withdrawn; New): A method for the treatment of an HCV infection in a host, which comprises:

administering an effective amount of the pharmaceutical composition as claimed in claim 44.

Claim 68 (Withdrawn; New): The method as claimed in claim 67, wherein the host is a human.

Claim 69 (Withdrawn; New): The method as claimed in claim 67, wherein the host is also infected with HIV and/or HBV.

Claim 70 (Withdrawn; New): A method for the treatment of an HCV infection in a host, which comprises:

administering an effective amount of the pharmaceutical composition as claimed in claim 45.

Claim 71 (Withdrawn; New): The method as claimed in claim 70, wherein the host is a human.

Claim 72 (Withdrawn; New): The method as claimed in claim 70, wherein the host is also infected with HIV and/or HBV.

Claim 73 (Withdrawn; New): A method for reducing the biological activity of a *Flaviviridae* viral infection in a host, which comprises:

administering an effective amount of the pharmaceutical composition as claimed in any one of claims 46-52 and 54.

Claim 74 (Withdrawn; New): The method as claimed in claim 73, wherein the host is a human.

Claim 75 (Withdrawn; New): The method as claimed in claim 73, wherein the host is also infected with HIV and/or HBV.